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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,143	12/15/2003	Junji Machida	325772026410	9282

7590 03/22/2005

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EXAMINER

BRASE, SANDRA L

ART UNIT PAPER NUMBER

2852

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,143

Applicant(s)

MACHIDA ET AL.

Examiner

Sandra L. Brase

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/924,494.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 16-22, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurokawa et al. (US 5,619,311) in view of Machida et al. (US 5,875,379) and Kasuya et al. (US 5,571,653).

4. Kurokawa et al. (...311) disclose an image forming apparatus comprising: an image bearing member (204, 304, 2104, 3103 and 3401); a charger member (101, 2102 and 3101) disposed in contacting relation with the image bearing member, and having a rubber hardness of more than 42 degrees, where the hardness can be in the range of 50 to 80 degrees (abstract; col. 3, line 53 – col. 4, line 12; col. 7, line 55 – col. 8, line 11; col. 21, line 56 – col. 22, line 7; and col. 22, lines 37-39 and 49-51) and a volume electrical resistance of $3 \times 10^8 \Omega \text{ cm}$ (col. 7, lines

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60-61); a developing device (2405, 3105 and 3403) including a developer carrying member for carrying a toner on its surface; and a transfer member (3106 and 3404) for transferring the toner image thus formed on the image bearing member onto a receiving medium. The charging member is a roller and comprises a metallic roller and a surface layer laid over an outer periphery of the roller (abstract; col. 7, lines 55-65; and col. 16, lines 18-23). The charging roller may have a coat layer laid over the elastic layer (abstract; col. 7, lines 55-65; and col. 16, lines 23-29). The charger member includes an electroconductive material (col. 7, lines 55-65; col. 10, lines 4-14; and col. 18, lines 55-63). However, Kurokawa et al. (...311) do not disclose the specific components of a developing device including toner storage and a regulating member, and the specific toner used. Machida et al. (...379) disclose an image forming apparatus including a developing device including a developer carrying member (11) for carrying a toner on its surface, a storage portion for storing the toner (col. 7, lines 35-38), and a regulating member (16) disposed in contacting relation with the surface of the developer carrying member for regulating the amount of toner carried on the developer carrying member (col. 7, lines 43-49); and col. 8, lines 40-49), where the developing device operates to form a toner image on an image bearing member (col. 1, lines 9-12; and col. 3, lines 44-47). It would have been obvious to one of ordinary skill in the art at the time of the invention for the developing device to include the storage portion and the regulating member that regulates an amount of toner on a developer carrying member, as disclosed by Machida et al. (...379), since it is notoriously well known in the art to have a portion to store toner so that toner can be supplied by the developer carrying member to an image carrier so that a latent image is developed to form a toner image, and it is notoriously well known in the art to have a regulating member so that a toner amount on a

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developer carrying member is controlled. Kasuya et al. (...653) disclose a toner used in a developing device containing an organic aromatic solvent and a vinyl monomer in combined concentrations of not more than 1,000 ppm (abstract; col. 2, line 50 – col. 3, line 15; col. 9, lines 29-36; and Table 2), where it is preferable that the combined concentrations be made not more than 700 ppm, and more preferably not more than 300 ppm (col. 9, lines 29-36). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the claimed type of toner, as disclosed by Kasuya et al. (...653), since such a toner is well known in the art for use with a developing device to develop images and this toner exhibits good fixing efficiency since it does not stick to a fixing member and prevents odors that may be given out during fixing.

5. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurokawa et al. (US 5,619,311) in view of Machida et al. (US 5,875,379) and Kasuya et al. (US 5,571,653) as applied to claims 16 and 22 above, and further in view of Masuda et al. (US 5,659,854).

6. Kurokawa et al. (...311) in view of Machida et al. (...379) and Kasuya et al. (...653) disclose the features mentioned previously, but do not disclose the charger member having a volume electrical resistance in the claimed range. Masuda et al. (...854) disclose an image forming apparatus including a charger member that has a volume electrical resistance in the range of $10 - 10^9 \Omega \text{ cm}$ (col. 4, lines 39-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the charger member have a volume resistance in the claimed range, as disclosed by Masuda et al. (...854), since such a charger member with a resistance in the claimed range ensures effective charging for a long term.

Response to Arguments

7. Applicant's arguments filed 1/7/05 have been fully considered but they are not persuasive.
8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one would be motivated to use the toner of Kasuya et al. (US 5,571,653) since such a toner exhibits good fixing efficiency since it does not stick to a fixing member and prevents odors that may be given out during fixing.

Final Rejection

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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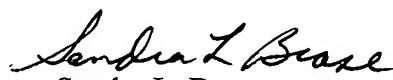
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is 571-272-2131. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley, can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sandra L. Brase
Primary Examiner
Art Unit 2852

March 18, 2005